WHAT IS CLAIMED IS:

1. A printing system comprising:

aplurality of printing apparatuses connected together so as to communicate with each other, each of said printing apparatuses having a printing engine and a printing control section, and

a density converted characteristic generating means arranged in said printing control section of one of said printing apparatuses other than the printing apparatus used for printing and for converting output density values corresponding to density values inputted to the printing apparatus used for printing so that the output density values exhibit an ideal characteristic.

15

20

25

10

5

- 2. A printing system according to claim 1, wherein environmental-condition setting means for actively realizing arbitrary environmental conditions is provided in the printing apparatus which is different from said printing apparatus used for printing and which comprises said density converted characteristic generating means.
- 3. A printing system according to claim 1, wherein said density converted characteristic generating means calibrates said output density values.
 - 4. A printing system having a first printing

apparatuses used for printing, a second printing apparatus that executes a calibration process on the first printing apparatus, and a network connecting said first and second printing apparatuses together, comprising:

wherein said second printing apparatus comprises a printing engine including a temperature sensor, a humidity sensor, and a density sensor, and a printing control section which acquires information from said various sensors in the printing engine to provide calibration process information to said first printing apparatus; and

5

10

15

20

said printing control section comprises density converted characteristic generating means for converting output density values corresponding to density values inputted to an arbitrary printing apparatus used for printing so that the output density values exhibit an ideal characteristic.

- 5. A printing system according to claim 4, wherein said printing control section comprises environmental-condition setting means for actively realizing arbitrary environmental conditions on the basis of information from said various sensors in said printing engine.
- 6. A printing method used in a printing system comprising a first printing apparatuses used for printing, a second printing apparatus that executes a calibration

process on the first printing apparatus, and a network connecting the first and second printing apparatuses together, the method comprising:

a step of sensing a temperature of the second printing apparatus when the first printing apparatus requests a calibration process from the second printing apparatus;

5

10

15

20

25

a step of temperature information providing which comparing the temperature of the second printing apparatus acquired by the temperature sensing step with a temperature of the first printing apparatus to provide temperature information indicative of the need for heating or cooling;

a step of sensing a humidity of the second printing apparatus;

a step of humidity information providing which comparing the humidity of the second printing apparatus acquired by the humidity sensing step with a humidity of the first printing apparatus to provide humidity information indicative of the need for humidification or dehumidification;

a step of executing a process on the basis of information obtained from the temperature information providing step and the humidity information providing step, then reading the density of each patch of a patch pattern in the second printing apparatus, and generating density converted characteristic information on the basis of density results which information is required to obtain a target density characteristic.

- 7. A printing method according to claim 6, further comprising an environmental-condition setting step of actively realizing arbitrary environmental conditions during a calibration process executed by the second printing apparatus.
- 8. A printing method used in a plurality of printing apparatuses connected together in a printing system so as to communicate with each other, comprising:

10

15

a step of instructing an external printer to generate a density converted characteristic;

- a step of receiving the density converted characteristic created by said external printer in accordance with said instruction; and
- a step of switching said received density converted characteristic when a print job being processed is finished.
- 9. A printing method according to claim 8, wherein as said external printer, one of the plurality of printers connected together via the network through which the instruction is transmitted is searched for, the one of the printers being similar to said instructing printer.
- 25 10. A printing method used in a plurality of printing apparatuses connected together in a printing system so as to communicate with each other, comprising:

a step of receiving an instruction on generation of a density converted characteristic, from an external printer;

a step of generating density converted characteristic information, in accordance with said instruction, by forming patches on a medium and measuring the patches; and

a step of transmitting said generated density converted characteristic so that the density converted characteristic can be used for a density converting process

10 executed by said external printer.